

In the Claims:

Please amend the claims as follows:

1. (currently amended) A method for addressing dynamic random access memory, [[with]] comprising:
 - providing a row address and a column address to addressing terminals of the memory, in intervals provided by a timing clock signal,
characterised in
 - dividing the row address and/or the column address into parts, [[and]]
 - dividing the column address into two parts, and
 - providing the respective parts to the address terminals at a rising, and a falling edge of the timing clock signal with
 - providing the two parts of the column address, respectively, after a latency time for processing the row address at a first falling edge and a following rising edge within a timing cycle of the timing clock signal.
2. (currently amended) The method of claim 1, wherein the respective parts are provided to the address ~~terminal~~ terminals at consecutive rising and falling edges of the timing clock signal.
3. (original) The method of claim 1, with dividing the row address into two parts.
4. (original) The method of claim 3, with providing the two parts of the row address, respectively, at a first rising edge and a first falling edge within a timing cycle of the timing clock signal.
5. (canceled)
6. (canceled)

7. (currently amended) The method of claim [[6]] 1, with providing a latency of two rising edges for processing the row address.
8. (original) The method of claim 1, with dividing the row address and/or the column address into more than two parts.
9. (original) The method of claim 8, with providing the parts of the row address at rising and falling edges at the beginning of a timing cycle of the timing clock signal, respectively.
10. (original) The method of claim 8, with providing the parts of the column address after a latency time for processing the row address at the falling and rising edges at the end of a timing cycle of the timing clock signal, respectively.
11. (original) The method of claim 1, with providing a latency of two rising edges for processing the column address.
12. (original) The method of claim 1, with processing the parts of the row address and/or the parts of the column address provided sequentially at the address terminals within the memory.
13. (original) The method of claim 1, with processing parts of the row address within the memory before receiving the complete row address.
14. (currently amended) A dynamic random access memory device comprising
 - address terminals for receiving address information, and an address processing means for processing processor configured to process received row address and column address received via the address terminal terminals, as well as dividing the column address into two parts, wherein

~~characterised in that~~

- the address ~~processing means receive~~ processor receives at least parts of the row address and/or column address at rising and falling edges of a timing clock signal, respectively, and provides the two parts of the column address, respectively, after a latency time for processing the row address at a first falling edge and a following rising edge within a timing cycle of the timing clock signal.

15. (original) The memory device of claim 14, where a number of address terminals T is the address bus size ADR divided by N , such that $T = \left\lceil \frac{ADR}{N} \right\rceil$.
16. (original) The memory device of claim 15, where N is the number of parts for the row address and/or the column address .
17. (original) The memory device of claim 14, providing row data to a row buffer after the row address has been received.
18. (currently amended) A computer system comprising:
 - a central processing unit, [[and]]
 - a memory device, in particular according to claim 14, with
 - an address bus providing row address and column address from the central processing unit to the memory device sequentially,
 - a clocking device providing a timing clock signal with rising and falling edges,

~~characterised by~~

 - an address processing means dividing processor configured to divide the row address and/or the column address in parts, dividing the column address into two parts, and

[[~~-~~]]providing the respective parts to address terminals of the memory device at rising and falling edges of the timing clock signal with the providing the two parts of the column address, respectively, after a latency time for processing the row address

at a first falling edge and a following rising edge within a timing cycle of the timing clock signal.

19. (currently amended) A computer program product with a computer program stored thereon for providing address information to a memory device for accessing data within the memory device, the program comprising instructions operable to cause a processor to,

- provide a row address and a column address to addressing terminals of the memory device sequentially,

characterised by

- ~~dividing~~ divide the row address and/or the column address into parts, [[and]]
- divide the column address into two parts, and
- ~~providing~~ provide the respective parts to the address terminals at a rising and a falling edge of a clock signal, with the providing the two parts of the column address, respectively, after a latency time for processing the row address at a first falling edge and a following rising edge within a timing cycle of the timing clock signal.

20. (currently amended) A use of a memory device ~~of claim 14~~ comprising

- address terminals for receiving address information, and an address processor configured to process received row address and column address received via the address terminals, as well as dividing the column address into two parts, wherein

- the address processor receives at least parts of the row address and/or column address at rising and falling edges of a timing clock signal, respectively, and provides the two parts of the column address, respectively after a latency time for processing the row address at a first falling edge and a following rising edge within a timing cycle of the timing clock signal in consumer electronic devices or mobile communication devices.

21. (currently amended) A mobile communication device comprising a memory device ~~of claim 14~~ comprising:

- address terminals for receiving address information, and an address processor configured to process received row address and column address received via the address terminals, as well as dividing the column address into two parts, wherein
- the address processor receives at least parts of the row address and/or column address at rising and falling edges of a timing clock signal, respectively, and provides the two parts of the column address, respectively after a latency time for processing the row address at a first falling edge and a following rising edge within a timing cycle of the timing clock signal in consumer electronic devices or mobile communication devices.